

Title (en)

GRAPHITE ARTICLE HAVING PREDETERMINED ANISOTROPIC CHARACTERISTICS AND PROCESS THEREFOR

Title (de)

GRAPHITARTIKEL MIT VORBESTIMMTEN ANISOTROPEN EIGENSCHAFTEN UND VERFAHREN DAFÜR

Title (fr)

ARTICLE EN GRAPHITE COMPORTANT DES CARACTERISTIQUES ANISOTROPIQUES PREDETERMINEES ET PROCEDE CORRESPONDANT

Publication

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Application

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Abstract (en)

[origin: WO02081190A1] The invention presented is a graphite article having predetermined anisotropic characteristics, as well as a process for preparing the article. More particularly, the article is prepared by a process involving determining the desired anisotropic characteristics for a finished flexible graphite article (Fig. 1a); intercalating and then exfoliating flakes of graphite to form exfoliated graphite particles; forming a substrate graphite article by compressing the exfoliated graphite particles into a coherent article formed of graphene layers; and producing a controlled directional alignment of the graphene layers in the substrate graphite article to provide a finished graphite article having the desired anisotropic ratio. The article may be embossed and the relative amount of structure in an embossed flexible graphite wall can and will lead to differing anisotropic properties. The embossing apparatus (10) comprises two opposed elements (20) and (30).

IPC 1-7

B32B 9/00; **B29C 59/00**; **C01B 31/02**

IPC 8 full level

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CPC (source: EP US)

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